in Japan.

A MOST DELICATE INSTRUMENT

Local Experiments Under Professed and a different route chosen. sor Alexander's Direction With This Marvelous Machine

selsmograph, sometimes termed sets when nearly 30,000 people loct their mometer, forwarded by Professor John lives. By means of this marvelous in-Milne of London to British Commissioner Kenny, which has been lying in land, how many maxima of motion had the local custom house for months taken place, but it showed further that days. They are expected by the Cop-Mr. Kenny left for Japan in January there had been an error in transmistic, due next Friday.

The work of actual construction will ing of the seismograph had to be for June 15, so that all who were to reach be begun first at the reservoir to be warded to him. He wrote to Professor the stricken district after that date built in Kakaako. At the same time Manwell about the matter and the latwere in safety. August 31 of the same the work of excavation will be started ter after more correspondence finally year the isle of Wight instrument turned the instrument over to the Survey Department of the Hawaiian gov. June had taken place. On account of June had taken place.

Greek words meaning "earthquake taken place at or near that country on sistant, W. K. Knowlton, civil engiwriter" is one of the most delicate received. This was verified when the neer, are engaged in finishing all the machines ever invented. It consists of mail reached England four weeks la preliminary work. In their office in an iron bed plate and stand carried on ter. One more instance to show the three leveling screws. Resting against value of this instrument in detecting three leveling screws. Resting against fraud. Some weeks afterwards, the a needle point or pivot projecting from English papers announced that a great where each spadeful of earth is to be the base of the stand, and held in a earthquake had taken place in Kobe turned and each length of pipe laid. nearly horizontal position by a tie, is and that several thousand lives had a light aluminium boom. Attached to been lost. No doubt those who had sixed building has been erected on the the outer end of this boom there is a filled with anxiety. On this occasion small rectangular plate in which there the Isle of Wight instruments were are two silts, one of which is large and still indicating that nothing of the ground has been enclosed. Here will the other small. Partly for the pure magnitude described would have octhe other small. Partly for the pur magnitude described could have octhe other small. Partly for the pur magnitude described could have oc-pose of balancing the weight of the curred, and later it was discovered be stored all the material to be used, some and partly for outer end of the boom, and partly for dation. obtaining the "steady poin" of a seis"All this and much more is set out
mograph between the attachment of a in Professor Milne's first report to the
tie to the pivot, a weighted cross-bar society, a copy of which I have here,
tie to the pivot, a weighted cross-bar society, a copy of which I have here,
the building the cement will be mixed
and tested. Large quantities of cetient and pipe, and the testing machines are already on the ground.
From the present outlook before many
the right or left, the rectangular plate hoped may be achieved from these exmith the alice present to the light and corimers by the present outlook before many
days have passed Honolulu people will with its slits passes to the right and periments is to accurately determine left across a fixed slit in the lid of a the rate at which earthquake motion box, inside of which a two-inch strip is propagated over long distances. In some instances the rates which have of bromide paper is being driven by already been determined are so high. the whole of the latter slit. It how motion does not simply go around our earth, but that it goes through the value of the floating plate and left of the floating plate and mination of these rates of transit will through the slits in the same. When throw new light upon the effective right plate and mination of the effective right plate and will be remembered that some time ago the purpose of Health several times for the purpose of the pu the boom is steady, the resulting pho-gidity of our planet."

cogram on the moving bromide paper "Where do you propose to install the garding filtration works. The result Cavalry has been finally dismissed was that the Board passed a resolution from the service. "Where do you propose to Instail the cogram on the moving bromide paper instrument?" was asked.

"Where do you propose to Instail the instrument?" was asked.

"On the grounds of Oahu College, but band equal in width to that of the back from the buildings and street, so moving plate, down the center of which that there will be no jar or tremer to band are two very clearly defined disturb the delicate machinery. It will lines, one of which is thick and the I am waiting for the return of Profestother thin. To the right and left of sor Hitchcock, who is professor of the section works. The result Cavalry has been finally dismissed from the service.

"On the grounds of Oahu College, but recommending to the proper officials as that the Board passed a resolution from the service.

"On the grounds of Oahu College, but recommending to the proper officials as that the Board passed a resolution from the service.

"A letter from the Volcano House Bryde, assessable, \$16.50; Maunalel, paid up, \$100; McBryde, assessable, band are two very clearly defined disturb the delicate machinery. It will lines, one of which is thick and the I am waiting for the return of Profesother thin. To the right and left of sor Hitchcock, who is professor of this white band the parer will have geology in Dartmouth College, and been blackened by the light which en-been blackened by the light which en-tered at the two ends of the fixed slit. With the instrument, and I hope to have his valuable assistance in setting On one edge of, one of these black it up. It requires very little attention bands) at intervals of about two inches, after it is once in operation. In fact there will be seen a series of white it is clocklike in that it only requirer marks which have been produced by winding up and regulating once a day, the minute hand of a watch, the broad-daily records will, of course, be cant ened extremity of which has hourly to London by every mail." at the half hour passed over the end of the fixed slit, and for a period of about one minute eclipsed the light. Should the clock at any time have fail- Henry Waterhouse and Hou, M. D. ed to drive the bromide strip with remon three native dergymen will gularity this will at once be seen by shortly take an extended trip to the

any solid pier in an observatory, or on Desha of Hilo. It is also more than the coffee tributary to Hilo. The mill School on Thursday, July 20, at 10 a specially constructed pier in the likely that Rev. J. Rachane, a near ground floor of an ordinary dwelling ber of the upper house of the Hawaiian than throughout and the machinery is the newly wedded couple will go the passenger beyond the amount of the place at the Kamehameha Girls' fore the outbreak upon Mauna Loa.

The Company will not be liable for the outbreak upon Mauna Loa.

The Company will not be liable for the outbreak upon Mauna Loa.

The company regard the volcanic delivery of baggage or personal effects of the passenger beyond the amount of the summer residence of the passenger beyond the amount of or in a but or shed in the open. The Legislature will also accompany them all of the latest and most approved mediately to the summer residence of room should be dry and amply ventilat- but at his own expense. ed with shutters, through one of which red light can be admitted.

"This marvelous little instrument," said Professor W. D. Alexander yesterday, "costs fifty pounds in England, church at Boston, and afterwards to It is loaned to the Hawaiian Govern- New York, Chicago and Washington. ment on the recommendation of Pro-fessor Davidson of San Francisco by Professor John Milne, the great London scientist, who, with Professor Gray, invented it. All the expenses connected with sending the instrument to Honolulu have been paid by Profes-

sor Milne.
"The British Association for the Advancement of Science has a special stations of the times at which various phases of motion are recorded. By this means the foci of sub-marine disturbances, such, for example, as those

"This committee aims, among other things, to solve a question that is puz-zling geologists all over the world, and Do the vibrations produced by earthquakes go around or through the earth? Professor Milne's theory is that earthquakes originate under the sea from great submarine landslides. You know that it has been clearly proven that the bottom of the sea is composed of mountain ranges, valleys and depressions of more or less mag-nitude. Well, it is hoped from the experiments now being conducted in all parts of the world to find out the dan-gerous parts of the ocean beds."

principally to avoid them in laying cables. You are aware that the expense of repairing cables is enormous. It is hoped by locating the seat of subma-Registers in London Barridgeakes rine disturbances to be able to avoid Work at Actual Construction to to be generally accepted that the breaking of many of the cables already inid is due to submarine earthquakes. This is a matter that is of particular interest to us, as it affects the Pacific cables vitally. If, by means of these experiments, for instance, it is ascerproposed Pacific cable route is subject to earthquakes it can easily be avoid

or seismemeter, as it is sometimes called. This instrument is so delicate that it records in one continent earthquakes happening in another. Let me give you an instance. You remember the great earthquakes and tidal waves Department has finally received the in North Japan in June two years ago, The selsmograph, derived from two that news of a great earthquake having upon the latter's departure, and his as-

Through the kindness of Scanter

Senator Waterhouse, who will have

portunity of looking up relatives in Kentucky, while on the trip.

The delegation will likely meet much attention on their tour.

Around the World

VICTORIA, June 23.-Percy McCord committee of scientists, composed of VICTORIA, June 29.—Percy McCord, such eminent men as Lord Kelvin, Sir J. C. Voss, of the Victoria botel, and a F. J. Bramwell, Professor Knott and sealing master will leave Monday on others, whose object is to determine an eight-ton sloop to go around the the velocity with which motion is propagated around, or, possibly, through, the earth. To attain this the ous ports. The first point visited will committee desire records from given be Coos Island, thence to Callao, thence to Pitcairn Islands, around the Horn, up the South American coast, across the Atlantic from Rio, calling at Honolulu.

Off to Kohala

Rev. J. F. Lane and Mr. Fitz of folani College leave on the Kinas today to spend their vanation with Rev. J. H. Van Deerlin of Robata.

LITERAL

Sunday-school Teacher-New, Willie Green, you may tell the what you un-derstand by "the future state." Willie Green-Please, ma'am 11'a territory.

be Began Next , Week.

PREPARING FILTRATION PLANS

Being Used-Contractors Representatives Due on Coptic.

The work of actual construction on the sewerage system for Honolulu will begin next Monday. The contractors,

this similarity, it was at once stated who was left in charge by Mr. Hering the building the cement will be mixed days have passed Honolulu people will

> work, Messrs. Edwards and Knowlton any time. of consulting with the members re- Capt. John M. Neall, of the Fourth

Mr. Hering is in constant correon account of his wide reputation, he is constantly sought after. Only reincer for the new swere system to

HACKFELD COFFEE MILL.

spable of Handling All the Cof-

Tribune. The mill will be ready for Mainland. They are Rev. J. M. Ezera Principle.

The instrument may be placed on teo of Kaumakapili and Pey. S. L. weeks and is capable of handling all place at the Kamehameha Girls' any solid pier in an observatory, or on Desha of Hilo. It is also more than the coffee tributary to Hilo. The mill School on Thursday, July 20, at 10 dand. The capacity of the mill is 250 lus. Rev. W. M. Kincald will officiate bugs of cleaned coffee per day and is the Following is the list of prizewinders for the States shortly on his bridge largest affair of the kind in the Islands, at Iolani college: Fifth and Sixthtrip, will escort the party to the com-ing convention of the Congregational plant will probably do more toward in. Henry Hart, J. D. Almoku. Religious ereasing and keeping up the price of Philip Wong and Kim Fook. History coffee exported than any steps yet and geography, Le Chong. In the rows. Rev. Mr. Desha will take the op- taken for that purpose. One great with the Hawaiian coffee previously sent away has been the rough bring a lower price than it otherwise would. With the facilities soon to be had, the coffee for shipment will present es clean and finished appearance a the product of any other country

Chance of a Lifetime.

Professor C. H. Hitchcock of Dartmouth College, N. H., is certainly in luck. He left for Hawaii two weeks ago to examine the lava flows of past eruptions, not dreaming that Madame which from time to time have inter-fered with telegraph cables, may pos-sibly be determined, and new light thrown upon changes taking place in ocean beds.

Cape Verde, Lisbon and Rouen, to the Seine. After leaving Paris they go around by the way of Suez to the An-tipodes and Orient, thence home by the way of the South Sea Islands and world on his return to the Mainland.

Captain Cameron's Present,

Just after the Claudine left the haror last Tuesday evening Senator H. P. Baldwin approached Captain Cameron, the genial commander of that popular vessel and presented him with a beautiful and very powerful pair of marine glasses as a mark of appreciation and cateom. Captain Cameron was delighted with the gift.

Every cough makes your throat more raw and irritable. Every cough congests the lining membrane of your lungs. Cease tearing your throat and lungs in this way. Put the parts at rest and give them a chance to heal, You will need some help to do this and ou

Ayer's Cherry **Pectoral**

begin; the tickling in the threat ceases; the spasm weakens; the cough disappears not wait for pneumonia and consumption cut short your cold without delay.

Ayer's Cherry Pectoral cures because it heals. It goes to the very seat of trouble, quiets the inflammation and makes a permanent cure. Begun in time, it is the one great preventive to all serious lung troubles

HOLLISTER DRUG CO., Agents.

LOCAL BREVITIES.

Sugar still remains at 412 cents. Red rubber stamps a specialty at the Gazette office

The Mauna Loa is to go on her usual run on Friday. The Hilo band boys are taking a six

weeks' vacation. Postmaster-General Oat is to visit

the Mainland shortly. President and Mrs. Dole expect to leave for Kauai today.

Land Agent J. F. Brown has been granted a two months' vacation. Hon. S. M. Damon has resumed his

official duties as Minister of Finance. The Pacific Hardware Co. advertise water filters and coolers in many sizes. General A. S. Hartwell will be home on the Coptic, due next Thursday even-

The City of Para is the next transport due. She may be looked for at

pondence with his representatives in kiki has been leased by Special Agent Kihei, \$9.40. Honolulu. He is a very busy man as. Sewall, who will make his home there. The contract for building the road from Honaunau to the Napoopoo road has been awarded to Chas. E. Hooper.

whose bid was \$1550. W. W. Dimond & Co. advertise fine quality blown tumbiers in three designs at 75 cents per dozen. Read their advertisement for bargains.

Dr. Kinyoun, of the United States

nutactured.

Poneth English subjects, Lather Svans in the Third English sub-jects, Ed Mahaum, in the Second— General subjects, Fo Suc.

Kihei plantation will put in 1,500 acres of cane inside of the exat ninety days. Work has already commenced on the third well on the upper lands. F. R. McStocker was unfortunate enough to have the little finger of his right hand bitten off by a pet dog the other day, while trying to stop a dog

H SON ULU STIRK EXCHANGE

Honolulu, H. L. July 17, 1899.

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Session Sales-Morning Session-One hundred Olaa, .87½; 10 O. R. & L. Co., \$147.50; 300 Kihei, \$9. Afternoon Session-Fifty Kihei, \$9; Maunalei, \$15.

Outside Sales Reported—Seventy-nine Honomu, \$160; 10 O. R. & L. Co., \$146; 10 O. R. & L. Co., \$147.50. Quotation Changes-Twenty-eight.

HAWAHAN STOCK EXCHANGE Honolulu, July 17, 1899.

Bid-Kihel, \$9; Maunalel, \$15; Mc-Bryde, \$2.80; Nahiku, \$1; Ookala, \$21; Olaa, .75; Hart \$ Co., \$9.

Asked-Kamalo, \$2; Kihei, \$9.25; Kipahulu, \$145; Kona, \$30; Maunale!

The Robert Lewers residence at Wait- dred Olaa, .75; 100 McBryde, \$3; 25

THE VOLCANO HOUSE.

Present Company Secures a Renewal of Its Lease.

The Volcano Hotel Company secured property it occupies above the volcano will not hold itself responsible for of Kilauea, for a term of twenty-two for About II incling Ali the Coffee Marine Hospital service, positively 28for About II inc.

Marine Hospital service, positively 28serts that the two Japanese from the
Nippon Maru found drowned in San
The machinery for the Hackfeld cofferancisco harbor did not die of the
Tapanesers in the matter, and made years. Mr. E. C. Macfarlane says the risk. the mill has all been received and is plague. They merely showed signs of being put in place says the Hilo pneumonia. He said the bubonic some reduction of the rent. In other unions placed in the care of Pursers.

The mill has all been received and is plague. They merely showed signs of some reduction of the rent. In other unions placed in the care of Pursers.

The mill has all been received and is plague, they merely showed signs of some reduction of the rent. In other unions placed in the care of Pursers.

The mill has all been received and is plague, they merely showed signs of some reduction of the rent. In other unions placed in the care of Pursers. courage the company. The new lease ing to do so will be subject to an ad-was signed and delivered the day be-ditional charge of twenty-five per cent

> Queen Victoria's footmen wear wigs which have eight rows of curls, whereallowed seven rows, and those of the Lord Mayor of London are given six

and unprepossessing appearance it presented, and on that account would often Pacific Mail Steamship Co. Occidental & Oriental Steamship Co. AND Toyo Kisen Kaisha.

Steamers of the above companies will call at Honolulu and leave this port on or about the dates below mentioned:

FOR JAPAN AND CHINA: FOR SAN FRANCISCO: An the professor's forte is geology, he COPTIC ... JULY 21 CITY OF PEKING JULY 14 should be able to present some value AMERICA MARU JULY 29 GAELIC ... JULY 22 able contributions to the scientific CITY OF PEKING AUG. 8 CHINA ... AUG. 8

CHINA SEPT. 1 NIPPON MARU AUG. 25
DORIC SEPT. 9 RIO DE JANEIRO SEPT. 2 COPTIC SEPT. 12

For general information apply to

H. HACKFELD& Co., L'd. Agenti Mail Steamship Companies.

FOR TIME KEEP!

Should be in the pocket of every wearer of a Watch.

Many years' handling of Watches convinces us, that price considered The Elgin is the most misfactory of a American Watches.

Cased in

NICKLE, SILVER, GOLD FILLED AND SOLID GOLD. We have a full line and sell them

at right prices. ELGINS reach us right.

ELGINS reach you right. Elgins stand for what is right in time keeping and lasting qualities, and that is why we are right in pushing the Elgin Watch.

H.F.WICHMAN

TIME TABLE S. S.JKINAU FREEMAN, Master.

MOLOKAI, MAUI, HAWAII.

Will leave Honolulu every Tuesday a 12 o'clock M., touching at Kaunakakai, Lahaina, Maalaca Bay, Kihel, Makena, Mahukona, Kawaihae and Laupahoehoe, arriving at Hilo Wednesday even-

Returning will sail from Hilo every Friday at 6 p. m., touching at above named ports, arriving at Honolulu Sat-

Will call at Pohoiki, Puna, once each month.

The popular route to the volcano is via Hilo. \$40 for the round trip, including all expenses.

S. S. CLAUDINE, CAMERON, Master.

MAUI. Will leave Honolulu every Tuesday

at 5 p. m., touching at Lahaina, Kahu-lui, Nahiku, Hana, Hamoa and Kipahulu, Maui. Returning, touches at above named ports, arriving at Honolulu Sunday mornings. Will call at Nuu, Kaupo, once each

S. S. LEHUA,

BENNEIT, Master.

MOLOKAI, MAUI, LANAL Sails every Monday for Kaunakakai, Kamalo, Maunalei, Kataupapa, Lahaina, Honolua, Olowalu. Returning, ar- up ou ives at Honolulu Saturday mornings.

This company reserves the right to make changes in the time of depart-OUT NOTICE, and it will not be responsible for any consequences arising

therefrom.

Consignees must be at the Landings recently a renewal of its lease of the to receive their Freight; this Company

Live Stock received only at owner's This Company will not be responsible

\$100.00, unless the value of the same be declared, at or before the issue of the ticket, and freight is paid thereon.
All employees of the Company are forbidden to receive freight without delivering a shipping receipt therefor in the form prescribed by the Company and which may be seen by shippers up-on application to the pursers of the

ompany's steamers. Shippers are notified that if freight is shipped without such receipt. It will be solely at the risk of the shipper.

C. L. WIGHT, President,

S. B. ROSE. Secretary.

CLARKE,

Metropelitan Meat Company

NO. 507 KING ST. HONOLULU, H. I.

and Family Butchers.

NAVY CONTRACTORS.

G. J. WALLER, Manager.

Highest Market Rates paid Hidea, Skins and Tallow.